2006–2007

Annual Report

taking health information further

Canadian Institute
for Health Information

Institut canadien
d'information sur la santé

The contents of this publication may be reproduced in whole or in part, provided the intended use is for non-commercial purposes and full acknowledgement is given to the Canadian Institute for Health Information.

Canadian Institute for Health Information
495 Richmond Road
Suite 600
Ottawa, Ontario
K2A 4H6

Phone: 613-241-7860
Fax: 613-241-8120
www.cihi.ca

ISBN 978-1-55465-053-8

© 2007 Canadian Institute for Health Information

How to cite this document:
Canadian Institute for Health Information, *Canadian Institute for Health Information Annual Report, 2006–2007* (Ottawa: CIHI, 2007).

Cette publication est aussi disponible en français sous le titre *Institut canadien d'information sur la santé — Rapport annuel, 2006-2007.*
ISBN 978-1-55465-055-2

Contents

TABLE OF CONTENTS

2 MESSAGE FROM THE BOARD CHAIR

3 MESSAGE FROM THE PRESIDENT

4 BOARD OF DIRECTORS

5 SENIOR MANAGEMENT

6 TAKING HEALTH INFORMATION FURTHER

8 HOW CIHI WORKS

9 TAKING HEALTH INFORMATION FURTHER IN 2006–2007

23 LOOKING AHEAD

25 AUDITORS' REPORT ON SUMMARIZED FINANCIAL STATEMENTS

MESSAGE FROM THE BOARD CHAIR

Our health care system is extremely important to Canadians, and they know it requires a sustained effort and a great number of resources. But Canadians want to know that their tax dollars—precious health care dollars—are being well-spent and that those tasked with spending them are accountable. How much is Canada spending on health care? How much are individuals paying out of pocket? How long are they waiting for care, and what is the quality once they receive it? What are their outcomes?

It has often been said you can't manage what you can't measure. Nowhere is that more true than in health care. In a system increasingly faced with challenges that include new technologies and an aging population, a key component of sustainability comes down to innovation through high-quality information.

High-quality health information identifies areas of strength and weakness and helps us track improvements. It is vital to delivering the highest standard of patient care in the most cost-effective way.

CIHI is dedicated to providing insights on those key health information issues and has become a trusted source of information for health professionals, researchers, decision-makers, the media and the public.

There remains much work to be done. In the year ahead, we will address ongoing information gaps in such areas as health human resources, and we will be finalizing work on important new quality indicators. In parallel, we will continue to make progress on improving comparability of information across Canada, so that Canadians have an even more complete picture of health and health services.

Looking to the future, I feel CIHI is poised to become an even stronger voice, continuing to support the needs of Canadians and their health system with credible and timely information. With the development of electronic health records and evolving methods of health care delivery, we must focus our efforts to ensure our ability to maintain leadership in the delivery of quality health information.

Graham W. S. Scott, C.M., Q.C.
Chair of the CIHI Board

MESSAGE FROM THE PRESIDENT

This was another busy year for CIHI—one marked by a great deal of growth and many new accomplishments. We released a record number of reports to the public, reflecting a greater wealth of comparable data in Canada. CIHI data were cited with greater frequency in health and medical journals, in provincial health planning documents, in the media—and even in parliamentary debates over the future of health care and the health system.

But perhaps this is the most important mark of success: our work has a tangible impact on how things are done across the health care system. CIHI's data are being used to improve care, to help health care providers understand the results of their work and share practices. And they are used at all levels—by provincial, territorial and federal governments, by health care managers and administrators, and by researchers, health planners and health care providers.

We've assisted provinces in determining how the remuneration they provide family physicians compares with that in other provinces. One province used our information to evaluate the success and outcomes associated with decentralizing stroke care. To respond to a timely policy question, CIHI was able to examine the impact of surgery in areas targetted for reduced wait times on the volume of other types of surgery. Researchers used CIHI data to examine the question of how inducing labour in pregnant women increased the likelihood of a potentially fatal amniotic fluid embolism. Even at the patient's bedside, our information is supporting change.

At the same time, CIHI is making significant headway in filling information gaps in such areas as pharmaceuticals and population health.

The recent federal budget, in which CIHI received funding on top of what the provinces, territories and federal government already provide, is recognition of the important role we play in providing information on emerging health priorities, and will enable us to move forward with our partners to identify and fill information gaps that still exist. We look forward to continuing to enhance and make accessible the amount of timely, comparable health data that is available—and used—in Canada.

Glenda Yeates
President and CEO

CIHI'S BOARD OF DIRECTORS

CHAIR
Graham W. S. Scott, C.M. Q.C.
Senior Partner, McMillan Binch Mendelsohn LLP

CIHI
Glenda Yeates (ex officio)
President and Chief Executive Officer

CANADA AT LARGE
Roberta Ellis
Vice President, Prevention Division
Workers' Compensation Board of British Columbia

Dr. Peter Barrett
Physician and Faculty
University of Saskatchewan Medical School

INTERIM CHAIR, CPHI COUNCIL
Dr. Cordell Neudorf
Chief Medical Health Officer and
Vice President, Research, Saskatoon Health Region

HEALTH CANADA
Morris Rosenberg
Deputy Minister

STATISTICS CANADA
Dr. Ivan Fellegi
Chief Statistician of Canada

REGION 1
BRITISH COLUMBIA AND YUKON TERRITORY
Gordon Macatee
Deputy Minister
British Columbia Ministry of Health

REGION 2
PRAIRIES, NWT AND NUNAVUT
Dr. Brian Postl
Vice-Chair of the Board
Chief Executive Officer, Winnipeg Regional
Health Authority

REGION 3
ONTARIO
Ron Sapsford
Deputy Minister
Ontario Ministry of Health and Long-Term Care

Kevin Empey
Executive Vice President,
Clinical Support and Corporate Services
University Health Network

REGION 4
QUEBEC
Roger Paquet
Deputy Minister
Ministère de la Santé et des Services sociaux

David Levine
President and Director General
Agence de la santé et des services sociaux de Montréal

REGION 5
ATLANTIC
Nora Kelly
Deputy Minister
New Brunswick Ministry of Health

Alice Kennedy
Chief Operating Officer, Long Term Care, Eastern Health
Newfoundland and Labrador

SENIOR MANAGEMENT

Glenda Yeates
President and Chief Executive Officer

Jean-Marie Berthelot
Vice President, Programs

Louise Ogilvie
Vice President, Corporate Services

Jennifer Zelmer
Vice President, Research and Analysis

Jack Bingham
Executive Director, Ontario

Lorraine Cayer
Director, Finance

Brent Diverty
Director, Continuing and Specialized Care, Information Services

Mark Fuller
Director, Architecture, Planning and Standards

Elizabeth Gyorfi-Dyke
Director, Canadian Population Health Initiative

Kim Harvey
Director, Applications

Caroline Heick
Director, Acute and Ambulatory Care Information Services

André Lalonde
Executive Director, Corporate Planning and Quality Management

Anne McFarlane
Executive Director, Western Canada

Scott Murray
Chief Technology Officer

Andrea Neill
Chief Privacy Officer

Stephen O'Reilly
Executive Director, Atlantic Canada

Indra Pulcins
Director, Health Reports and Analysis

Francine Anne Roy
Director, Health Resources Information

Serge Taillon
Executive Director, Quebec

Greg Webster
Director, Research and Indicator Development

Douglas Yeo
Director, Data Quality, Case Mix and Methodology

TAKING HEALTH INFORMATION FURTHER

Canadians turn to CIHI for information they can trust—information that will guide their decisions. As a not-for-profit, independent organization serving all Canadians, CIHI has earned that trust one piece of data at a time.

The key is collaboration. CIHI works directly with the major health players: the provincial, territorial and federal governments; the regional health authorities and the hospitals; the researchers; the associations representing health care professionals; and private-sector sources of information.

WHAT CIHI DOES

CIHI provides data and analysis to health system managers, researchers, policy-makers and members of the public who seek answers to critical questions about the delivery of health care and the health of Canadians. Are Canadians getting reasonable access to the health services they need? What are our investments in the professional resources and equipment? What are the factors outside the health system, including how we live, work and play, that make Canadians healthy?

CIHI also provides expertise. Professionals throughout the health sector look to CIHI for its knowledge on population health and the critical building blocks of comparable health information—includings standards, classification systems, data quality and indicators. CIHI shares its expertise through reports, conferences, its website, daily interactions with professionals in the health system and hundreds of hands-on education workshops delivered every year across Canada.

Supporting health care management: CIHI generates information that helps governments, regional health authorities, health system managers and various organizations within and outside the health sector make decisions to ensure optimal use of resources and improve health outcomes.
Informing public policy: CIHI supports the development of key data and information to inform policies that affect the health of Canadians.
Informing the public: CIHI informs Canadians about their health system and the factors that affect their health.

HOW CIHI WORKS

CIHI's work is guided by seven strategic directions, developed after a Canada-wide consultation process in 2004. These directions respond to what was heard during the cross-Canada dialogue—and guide CIHI as a leader in health information.

CIHI'S STRATEGIC DIRECTIONS

1 CIHI will be a **premier** Canadian **source of** unbiased, credible and comparable **health information**.

2 CIHI will enhance its **data holdings**.

3 CIHI will produce vital **information** to improve the health of Canadians and of their health systems.

4 CIHI will enhance information **quality**.

5 CIHI will improve **access** to data, **and** will do so in a **privacy**-sensitive manner.

6 CIHI will provide leadership to ensure that **future** data and information **needs** are met.

7 CIHI will continue to be a dynamic **organization** with a highly motivated workforce.

TAKING HEALTH INFORMATION FURTHER IN 2006–2007

CIHI's work touched virtually every area of the health system this year, from emergency departments to home care, and contributed to the public's understanding of the factors that contribute to good health.

This year, CIHI increased the amount of information it collects by creating new data holdings and by building greater capacity with its partners so they can contribute more data.

CIHI used this wealth of information to do more analysis and make available to the public more reports on different aspects of the health system and the health of Canadians. In addition, CIHI worked hard to improve access to Canada-wide data by working with its partners to develop better tools.

This year, CIHI also made significant strides in improving comparability of information across Canada. There are many intricate issues that come with gathering comparable data from so many different sources, including health care providers and professional bodies, provinces and territories and the private sector. CIHI's expertise in standards, classifications, indicators, data quality and analysis supported partners across the country as they strengthened their contribution to a growing Canadian body of information.

RECENT FINDING FROM CIHI

Wait times: Despite a significant increase in the number of surgeries in wait time priority areas in 2005–2006, a CIHI analysis, *Surgical Volume Trends Within and Beyond Wait Time Priority Areas*, found no evidence at the national level that numbers of other types of surgeries decreased as a result.

A PREMIER SOURCE OF TIMELY HEALTH INFORMATION

The growing body of data and information disseminated by CIHI enables professionals to identify strengths and weaknesses in the health system and track improvements over time. It also supports decision-makers as they plan for the future, and helps Canadians make more informed decisions about their own health.

This year, CIHI worked hard to produce information that provided some answers and insights into health issues of greatest public concern.

WAIT TIMES

There are few health issues more top-of-mind in Canada than improving access to care and reducing wait times. The information gaps in these areas are many, but CIHI is committed to the development of more information to help Canadians assess who is waiting for what, for how long and what factors influence wait times.

This year, CIHI developed new wait time indicator methods and produced several reports that advanced knowledge of wait times in Canada:

- *Understanding Emergency Department Wait Times: How Long do People Spend in Emergency Departments in Ontario?*
- *Surgical Volume Trends Within and Beyond Wait Time Priority Areas*
- An update of the provincial wait times tables included in the *Waiting for Health Care in Canada* report

PATIENT SAFETY

A 2004 study by Ross Baker and Peter Norton financially supported by CIHI showed that 1 in 13 adult patients admitted to acute care hospitals in Canada in 2000 experienced adverse events. This ground-breaking study sparked renewed interest in patient safety across Canada. Safer Healthcare Now!, a grassroots safety campaign, is one response to this challenge. The Canada-wide campaign focuses on six proven strategies, with a goal of achieving measurable reductions in avoidable morbidity and mortality.

CIHI has joined with organizations from across Canada to support the campaign's goals and its measurement strategy. At the request of campaign partners, CIHI is leading the effort to

RECENT FINDING FROM CIHI

Health spending: Health spending continues to grow in Canada, but at a slightly slower rate. *National Health Expenditure Trends, 1975–2006* revealed that total health expenditures are estimated to have reached $148 billion in 2006, up 5.8% from the previous year. This represents the smallest annual growth rate since 1998.

develop and calculate hospital-standardized mortality ratios (HSMRs) for acute care facilities. It is expected that the HSMR will be an important indicator that will help improve the quality of care and save lives over time. Following the initial validation process, CIHI will publish the results late in the fall.

PRIMARY HEALTH CARE

Though primary health care is the "entry point" into the health system for most Canadians, it is also an area for which we have very limited data. CIHI is working with its partners to fill this gap through the development of Canadian primary health indicators. As an important first step, this year CIHI issued a report identifying a list of Canadian primary health care indicators that will be useful to health system managers and planners. The report followed an extensive CIHI-led consultation process that brought together primary health care experts from across Canada.

HEALTH HUMAN RESOURCES

The debate over the sustainability of health care in Canada often focuses on numbers: how many physicians and nurses do we need to meet the health needs of Canadians? CIHI's data inform some of these debates. But CIHI does so much more than count physicians and nurses. It has also been working to improve the information about the services they provide and where they work.

This year, CIHI released comprehensive findings from the 2005 National Survey of the Work and Health of Nurses, the largest-ever national survey of nurses. A collaborative effort between CIHI, Statistics Canada and Health Canada, the survey garnered data that helped identify relationships between selected health outcomes, the work environment and work–life experiences.

PRESCRIPTION DRUGS

Spending on prescribed drugs has been one of the fastest-growing components of total health spending over the last 20 years in Canada. Clearly, now more than ever, there is a need to better understand the role that prescribed drugs play in the quality of our health care. Canada's heath care leaders need good information in order to manage our public drug programs and make decisions about pharmaceutical-related policies.

One of the challenges is that comparable information on drug coverage, public formularies, description of public drug plans and drug

RECENT FINDING FROM CIHI

Burden of mental illness: CIHI's report *Hospital Mental Health Services in Canada, 2003–2004* found that more than one in three patients discharged from hospital with a diagnosis of mental illness are readmitted to hospital within one year. The hospital readmission rate for mental illness patients is significantly higher than that for the average acute care patient.

Data in action

PEDIATRIC CENTRES GET ACCESS TO COMPARABLE DATA THROUGH CIHI PORTAL

CIHI Portal played a pivotal role recently in helping a network of 16 academic pediatric health centres create what they say is their "best-ever" annual report.

Thanks to the web-based tool, for the first time the Canadian Association of Paediatric Health Centres' Canadian Paediatric Decision Support Network was able to include reliable and comparative data from all of the network's 16 centres. Its annual report also included morbidity data from the Canadian Association of Paediatric Health Centres' four Quebec facilities, which looks at sickness and disability among children.

"Prior to participating in the CIHI Portal, not all of our sites were able to effectively access peer data," says Lisa Gordon, the network's national coordinator. "We had our own private network where we had a database, but it wasn't consistent."

In past years, each centre had submitted data from what it considered its pediatric population, but the definition of who fell into the pediatric group was not consistent. Using CIHI Portal, users can report on pediatric data using standard and approved definitions.

"Now all of our participating sites have equal access to pan-Canadian data," says Gordon. "Additionally, we also have access to census data for the creation of rates according to population and geographic data, which can be used for many purposes."

utilization is rare due to a lack of standardized data. For this reason, CIHI is working closely with ministries of health across the country to implement the National Prescription Drug Utilization Information System (NPDUIS). This Canada-wide system provides access to comprehensive and comparative information on prescription drug use. This year, CIHI completed the development of this new information system and started receiving data from several jurisdictions. Work is now underway to use these data to analyze drug utilization in seniors.

POPULATION HEALTH

Canadians from both within and beyond the health sector are looking to CIHI for more information, not only on the health system, but also increasingly on the factors that affect their health.

This year, CIHI's Canadian Population Health Initiative held a series of consultations with key health stakeholders across Canada. The result is *Action Plan 2007–2010*, a document that outlines the four themes that CIHI will focus on in the area of population health in the coming years: place and health, healthy weights, determinants of mental health and resilience, and reducing gaps in health.

BETTER HEALTH WITH BETTER DATA

Answering fundamental questions about Canadians' health and the health system requires a systematic and thoughtful approach to data collection, sharing and analysis. CIHI seeks to strike a balance between improving existing data holdings, creating new ones and using data that have already been collected.

This year, CIHI focused on the enhancement of several existing data holdings: the National Trauma Registry (NTR), the Ontario Trauma Registry (OTR), the National Physician Database (NPDB) and the Canadian Joint Replacement Registry (CJRR)—which now includes the Ontario Joint Replacement Registry. CIHI also completed the development of the Ontario Mental Health Reporting System (OMHRS). In British Columbia, CIHI initiated a pilot of the National Ambulatory Care Reporting System (NACRS).

A relatively young data holding, the Home Care Reporting System (HCRS), received its first live clinical, administrative and medication data from

RECENT FINDING FROM CIHI

Access to doctors: For the second consecutive year, there were more doctors coming to work in Canada than leaving the country (*Supply Distribution and Migration of Canadian Physicians, 2005*). International comparisons show that in 2004, the number of Canadian physicians per 1,000 population was significantly lower than the Organisation for Economic Co-operation and Development (OECD) average.

Data in action

USING INFORMATION TO CLOSE GAPS

Researchers in Atlantic Canada used CIHI reports on health indicators and workforce trends, as well as data from four of CIHI's databases to help them create a model that would project health care staffing gaps in Atlantic Canada.

The model allowed the Atlantic region to test how well different policies would address the human resources challenges there, resulting in a report called the *Atlantic Health Human Resources Planning Study*.

"CIHI was instrumental in fully understanding the health care workforce," says Gail Tomblin Murphy, one of the lead researchers on the project. "The staff at CIHI helped us sort out the numerous analytical and data challenges such as entry and exit rates." A representative from CIHI also sat in on the project's steering committee.

The east coast's health care system and health care training facilities both stand to benefit from this work: researchers were also able to use the results to make recommendations on how to address predicted shortages or surpluses in training capacity for seven different professions in each of the four Atlantic provinces—licensed practical nurses, medical laboratory technologists, medical radiation technologists, occupational therapists, physiotherapists, registered nurses and social workers.

the Yukon Territory. The Continuing Care Reporting System (CCRS) added Ontario long-term care sites to the list of facilities now submitting data to this data holding.

In the area of health human resources, CIHI made significant progress in the development of five new data holdings that help paint a more complete picture of health care providers—beyond nurses and physicians—in this country. For the first time ever, comparable information on occupational therapists and pharmacists will soon be made publicly available.

VITAL INFORMATION TO IMPROVE THE HEALTH OF CANADIANS AND THEIR HEALTH SYSTEM

Over the past year, CIHI has produced some 50 analytical products that provide essential information on acute care, the continuum of care and the health of Canadians.

Here are just some of the reports CIHI released to the public this year:

> *Health Care in Canada 2006*, including *Health Indicators 2006*

> *Giving Birth in Canada: The Costs*

> *Surgical Volume Trends: Within and Beyond Wait Time Priority Areas*

> *Understanding Emergency Department Wait Times: How Long Do People Spend in Emergency Departments in Ontario?*

> *Understanding Physician Satisfaction at Work: Results From the 2004 National Physician Survey*

> *Hospital Mental Health Services in Canada*

> *Resident Safety: Characteristics Associated With Falling in Ontario Complex Continuing Care*

> *National Health Expenditure Trends, 1975–2006*

> *Public-Sector Expenditures and Utilization of Home Care Services in Canada: Exploring the Data*

> *Canadian Joint Replacement Registry (CJRR) 2006 Report:—Hip and Knee Replacements in Canada*

RECENT FINDING FROM CIHI

Place and health: Canadians living in rural areas have higher mortality rates than those living in urban areas, as noted in *How Healthy Are Rural Canadians? An Assessment of Their Health Status and Health Determinants*, produced by CIHI's Canadian Population Health Initiative. What's more, *Improving the Health of Canadians: An Introduction to Health in Urban Places* found important health differences between neighbourhoods within Canada's big cities.

Data in action

MOVING INFORMATION

CIHI data played a part in improving the health of Canadians in 2006 when they were used in a series of presentations aimed at increasing physical activity among Aboriginal communities.

As a manager for the First Nations and Inuit Health Branch of Health Canada at the time, Randy Adams used data from a 2005 report from CIHI's Canadian Joint Replacement Registry in a presentation he created called "Getting Active about Physical Inactivity."

"I made a connection between regular physical activity and obesity, and then to hip and knee replacements," Adams says. Data he used from CIHI's *Hip and Knee Replacements in Canada* report showed that overweight patients were two times more likely to need a hip or knee replacement, while obese people were three times more likely.

Adams took his presentation around Canada, talking to people such as Aboriginal diabetes workers and community nutritionists. "I even did a presentation out at Vancouver with a focus on Aboriginal participation in the 2010 winter Olympics," he says.

"The presentation raised awareness of the importance of regular physical activity when it comes to Aboriginal people's health and quality of life," says Adams. It also provided health professionals such as community diabetes workers with tools to help increase physical activity levels among Canada's Aboriginal population.

> *Improving the Health of Canadians* report series, including:

- *Improving the Health of Young Canadians*
- *Improving the Health of Canadians: Promoting Healthy Weights*
- *Improving the Health of Canadians: An Introduction to Health in Urban Places*

HIGH-QUALITY INFORMATION

Creating information that is comparable across Canada requires CIHI to do a great deal of behind-the-scenes work with health facilities and other data providers country-wide. As a result, CIHI's expertise on standards, classification systems and grouping methodologies—among other building blocks of quality health information—is now internationally recognized.

This year, CIHI made progress on a few key initiatives that are essential to improving the quality and comparability of health information in Canada. Among them was a pilot for the new acute care inpatient grouping methodology (CMG+), which was developed over a three-year period. This pilot involved over 90 health facilities from across Canada and proved to be very successful—as well as a very useful source of feedback for further enhancements to the new methodology. This new methodology will allow hospitals, regional health authorities and ministries to get a clearer picture of the resources used by groups of similar acute care patients, which in turn supports the efficient management and allocation of health care resources.

CIHI also developed new wait time indicator methods and launched a formal evaluation of the Health Information Roadmap Initiative.

Also this year, tracking trends and patterns right across the country became a great deal easier. Health care facilities in all provinces and territories are now using International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Canada (ICD-10-CA) and Canadian Classification of Health Interventions (CCI) standards when collecting and reporting data on diagnoses and procedures. Working closely with health facilities, CIHI has spent several years not only developing these standards, but also delivering hundreds of hands-on workshops designed to help coders in facilities

RECENT FINDING FROM CIHI

Public versus private spending: CIHI's *National Health Expenditure Trends, 1975–2006* showed that the ratio of public to private spending in health care has remained relatively stable in Canada over the past decade, with a public/private split of 70/30. This places Canada slightly above the OECD average, where private funds represent 27% of health spending (2004 data).

Data in action

FORECASTING FOR THE FUTURE

Analyzing the cost of health care is critical when it comes to forecasting the economic and fiscal future of Canada and its provinces. That's why the Ontario Ministry of Finance used CIHI data as part of its first-ever long-range assessment of Ontario's financial prospects.

Released in 2006, *Toward 2025: Assessing Ontario's Long-Term Outlook* forecasts changes in Ontario's economy and demographics over the next two decades and their potential impact on the public sector and Ontario's finances. It also analyzes the fiscal issues likely to affect the long-term sustainability of Ontario's economy and the public sector.

"The CIHI data helped us interpret what our health care expenditures would be," says Paul Lewis, manager of demographics at the Ministry of Finance. "CIHI helped us estimate what the impact of the demographic factors would be—aging, utilization, inflation and the growth of the population."

With a chapter dedicated to the drivers of future health care costs in Ontario, the report draws on information from many sources, including CIHI's National Health Expenditure Database, CIHI's Canadian Population Health Initiative and a handful of CIHI reports.

adapt to the new standards. A public submission process is now in place to allow users of ICD-10-CA and CCI the opportunity to provide input into how to improve these classification systems.

Other accomplishments this year include the launching of CIHI's Data Dictionary. This tool allows users to adopt standardized definitions for health-related data elements when building new data holdings or contributing data to CIHI's newest data holdings and systems. In addition, CIHI launched a new bilingual eQuery application this year that allows clients to submit queries relating to an expanded set of programs and products at CIHI.

ACCESS TO DATA

CIHI understands the role it plays in making the data available and easy to use, and facilitating greater use of the data to improve health care.

On this front, CIHI moved forward with CIHI Portal this year. Using CIHI Portal, Canada's data-submitting health care organizations, such as hospitals, regional health authorities and ministries of health, are able to explore and answer pressing health care questions at the regional or facility level.

KNOWLEDGE SHARING

An important part of CIHI's work goes beyond simply making information available. CIHI is striving to ensure that its partners and the public are able to use CIHI's information to solve health and health system challenges.

CIHI's education workshops (on the web and in person), conferences and focused consultations are designed to ensure that it is sharing its expertise and knowledge with those who need it most—those working on the front lines of the health system.

This year, CIHI delivered 358 education sessions. The introduction of new and expanded programs, coupled with increased use of distance education, resulted in a significant rise in registrations—up to 9,693 from 8,381 in the previous year.

In a major step forward for health information professionals, CIHI also announced that it would be collaborating with the Canadian Health Information Management Association (CHIMA) to make its extensive education programs recognized as credits toward the Continuing Professional Education (CPE) program for health information management (HIM) professionals.

RECENT FINDING FROM CIHI

Pending retirements: The nursing workforce is aging in Canada. New data from *Highlights from the Regulated Nursing Workforce in Canada, 2005* indicated that more than one-third of the RN workforce is 50 years of age or older, with more than 7% aged 60 or over.

Data in action

ASSESSING THE RISK

It has long been debated whether inducing labour in pregnant women increases the likelihood of having an amniotic fluid embolism—an often-fatal and rare reaction that can happen when amniotic fluid enters the mother's blood stream through the placenta, triggering her heart and lungs to collapse.

"Data from CIHI's Discharge Abstract Database was key to exploring how induction made a difference to the likelihood of this happening," says Dr. Michael Kramer, who led the research team. "CIHI has been essential for surveillance activities and these kind of research projects for a good few years," says Kramer.

Researchers looked at 12 years of childbirth data from CIHI, spanning almost three million births. They found that women who had induced labour had an amniotic fluid embolism at a rate of 10.3 cases per 100,000 patients, while women whose labour began naturally had almost half that—5.4 per 100,000. These findings were published in the October 21, 2006 issue of *The Lancet*.

In addition, CIHI co-hosted several conferences that provided opportunities for health professionals to share best practices and learn about innovative approaches to health care delivery across Canada. These included e-Health 2006, Data Users' 2006 and the 12th Annual North American Collaborating Center Conference on ICF (International Classification of Functioning, Disability and Health).

CIHI is also interested in how its data are being used by researchers. CIHI has seen a steady increase in the number of journal articles in which CIHI data or reports are cited or sourced. In fact, this year saw a 49% increase in citations compared to 2005–2006.

Many researchers—as well as members of the public, the media, health professionals, decision-makers and health planners—access CIHI's information through its website. Last year, the site generated more than 2.1 million visits—up from 1.5 million visits in the previous year.

FUTURE DATA AND INFORMATION NEEDS

Meeting the evolving health information needs of Canada's decision-makers and the Canadian public is no small challenge. It requires a nimble system that can respond to changing realities—among them, emerging health priorities and new technologies. CIHI is providing leadership to ensure that Canada's future data and information needs are met.

This year, CIHI initiated important work in collaboration with Canada Health Infoway, Statistics Canada and provincial/territorial chief information officers on the development of a shared vision for health system uses of electronic health record (EHR) data.

DYNAMIC ORGANIZATION

At the heart of CIHI's efforts to produce quality health information is a dynamic organization composed of dedicated and skilled staff. CIHI has staff in Victoria, Edmonton, Toronto, Ottawa, Montréal and St. John's, and its numbers continue to grow as new products are launched and new databases are developed. CIHI is proud that an increasing number of these staff are bilingual. This year, CIHI launched an employee and family assistance program and for the second year in a row, was featured as one of Ottawa's top 15 employers.

RECENT FINDING FROM CIHI

Patient safety: Over one-third (35%) of nurses who took part in the 2005 National Survey of the Work and Health of Nurses reported occasional or frequent nosocomial infections in their patients. This is an infection that originates in a hospital or similar setting.

Data in action

DELIVERING THE STANDARDIZED PICTURE

Following the release of CIHI's 2004 *Giving Birth in Canada: A Regional Profile* report, the Capital Health Region in Edmonton, Alberta, recognized that the rate of lacerations (or tears) during delivery and use of forceps during delivery at some hospitals differed from the national rates.

The findings were presented to Capital Health's Women's Health Council, which includes administrators, practice specialists and physicians, who first looked at the data to see if there were practice or coding differences between the sites that would explain the regional differences.

Further investigation found that with respect to lacerations, one hospital had not been including level 1 and 2 tears. This led to an educational initiative and region-wide application of a standardized approach to coding.

For the finding on higher levels of forceps use, the Women's Health Council validated the report's findings and agreed that the results were appropriate considering the significant volume of high-risk births at that particular site.

"It was a good opportunity for us to use a national indicator as a benchmark for a particular service area," says Joanna Pawlyshyn, Vice President and Chief Operating Officer, Royal Alexandra Hospital and Executive Lead for Women's Health at Capital Health.

LOOKING AHEAD TO 2007–2008

As CIHI looks ahead to 2007–2008, it's not just going to increase the number of data holdings it has, it also plans to put more data into existing ones and improve the overall quality to ensure that it continues to accurately paint Canada's health care picture.

CIHI will be promoting the adoption of the National Prescription Drug Utilization Information System, the National Rehabilitation Reporting System, the Continuing Care Reporting System, the Home Care Reporting System, the National Mental Health Reporting System and the National Ambulatory Care Reporting System.

CIHI also plans to develop two additional health professions databases (medical radiation technologists and medical laboratory technologists), as well as new tools to support electronic data capture and submission, query, analysis and dissemination activities.

CIHI expects to complete special data quality reabstraction studies aimed at assessing data quality in clinical databases such as the Canadian Organ Replacement Register and the Discharge Abstract Database.

CIHI will also be collaborating with Statistics Canada on a work program related to health

RECENT FINDING FROM CIHI

Obesity consequences: The *Canadian Joint Replacement Registry (CJRR) 2006 Annual Report on Hip and Knee Replacements in Canada* found that 9 out of 10 knee replacement patients and 8 out of 10 hip replacement patients were either overweight or obese in 2004–2005. That year, 58,714 patients received joint replacements—an 87% increase over a 10-year period and a 10% increase from the previous year. In February, *Treatment of End-Stage Organ Failure in Canada, 1995 to 2004* found that the number of new diabetes-related kidney failure cases in Canada more than doubled over those 10 years. The type 2 diabetes driving the increase is directly linked to obesity and lifestyle factors.

outcomes, including a report on outcomes for those with diabetes or depression. In addition, it has plans for reports on health expenditures, workforce trends and health services, including rehabilitation and joint and organ replacements.

While continuing to invest more resources in producing analyses and reports, CIHI will work to deliver action-oriented information and improve access to its data. CIHI will also be working closely with health regions and its regional offices to identify and address their specific health information needs so that together, we can take health information further.

RECENT FINDING FROM CIHI

Changes in health care delivery: Canadians are having more surgery than they were a decade ago, but fewer of them are spending more than a day in hospital for their procedures, according to a CIHI analysis, *Trends in Acute Inpatient Hospitalizations and Day Surgery Visits in Canada, 1995–1996 to 2005–2006*. CIHI's first comprehensive report on public-sector spending on home care services, *Public-Sector Expenditures and Utilization of Home Care Services in Canada: Exploring the Data*, revealed that spending on home care more than doubled over 10 years, increasing at a faster rate than health care spending overall.

AUDITORS' REPORT ON SUMMARIZED FINANCIAL STATEMENTS

TO THE BOARD OF DIRECTORS
OF THE CANADIAN INSTITUTE
FOR HEALTH INFORMATION

The accompanying summarized balance sheet, statements of revenue and expenses and cash flows are derived from the complete financial statements of the Canadian Institute for Health Information as at March 31, 2007, and for the year then ended on which we expressed an opinion without reservation in our report dated May 4, 2007. The fair summarization of the complete financial statements is the responsibility of management. Our responsibility, in accordance with the applicable Assurance Guideline of The Canadian Institute of Chartered Accountants, is to report on the summarized financial statements.

In our opinion, the accompanying financial statements fairly summarize, in all material respects, the related complete financial statements in accordance with the criteria described in the Guideline referred to above.

These summarized financial statements do not contain all the disclosures required by Canadian generally accepted accounting principles. Readers are cautioned that these statements may not be appropriate for their purposes. For more information on the entity's financial position, results of operations and cash flows, reference should be made to the related complete financial statements.

Ernst & Young LLP

Chartered Accountants
Licensed Public Accountants

Ottawa, Canada,
May 4, 2007

BALANCE SHEET
AS AT MARCH 31

	2007 $	2006 $
ASSETS		
Current		
Cash	1,067,482	1,145,372
Accounts receivable	6,893,069	5,567,431
Accrued interest	4,601	536,344
Prepaid expenses	1,124,645	1,451,545
	9,089,797	8,700,692
Investments—Roadmap	50,424,323	75,979,238
Capital assets	9,830,380	10,080,954
	69,344,500	94,760,884
LIABILITIES		
Current		
Accounts payable and accrued liabilities	4,522,187	6,059,129
Unearned revenue	2,130,356	2,425,843
	6,652,543	8,484,972
Accrued pension benefits	2,234,434	1,483,345
Deferred contributions—Roadmap	47,946,579	72,140,528
Deferred contributions—Capital assets	5,513,096	5,392,271
Lease inducements	2,468,276	2,820,446
	64,814,928	90,321,562
NET ASSETS		
Invested in capital assets	2,281,095	2,362,140
Unrestricted	2,248,477	2,077,182
	4,529,572	4,439,322
	69,344,500	94,760,884

STATEMENT OF REVENUE AND EXPENSES

YEAR ENDED MARCH 31

	2007 $	2006 $
REVENUE		
Core Plan	15,116,557	13,290,282
Sales	1,904,050	3,246,795
Funding—Core	8,732,092	11,057,057
Funding—Roadmap	45,940,723	39,936,775
Interest	107,928	53,480
Miscellaneous	24,553	55,206
	71,825,903	67,639,595
EXPENSES		
Compensation	45,635,556	40,982,626
External and professional services	6,845,686	6,369,833
Travel and advisory committee expenses	3,748,440	3,919,327
Office—supply and services	7,623,220	7,449,408
Computers and telecommunications	4,156,601	3,748,349
Research grants and contributions	3,566,157	4,857,998
Miscellaneous	159,993	156,341
	71,735,653	67,483,882
Excess of revenue over expenses	90,250	155,713

STATEMENT OF CASH FLOWS
YEAR ENDED MARCH 31

	2007 $	2006 $
OPERATING ACTIVITIES		
Excess of revenue over expenses	90,250	155,713
Items not affecting cash:		
Amortization of capital assets	2,483,063	2,145,748
Amortization of lease inducements	(355,538)	(331,762)
Pension benefits	751,089	1,143,885
Amortization of deferred contributions—capital assets	(1,431,217)	(1,196,180)
Loss on disposal of capital assets	30,533	22,016
	1,568,180	1,939,420
Changes in non-cash working capital items	(2,299,424)	(1,356,033)
Net decrease in deferred contributions	(42,381,907)	(35,858,087)
Amortization of investments—Roadmap premiums	427,878	1,514,939
Loss on sale of investments—Roadmap	1,674	3,159
Roadmap initiative	19,740,000	15,000,000
Cash used in operating activities	(22,943,599)	(18,756,602)
INVESTING ACTIVITIES		
Acquisition of capital assets	(2,265,964)	(6,721,099)
Proceeds on disposal of capital assets	2,942	5,072
Acquisition of investments—Roadmap	(132,927,543)	(64,860,976)
Proceeds on disposal of investments—Roadmap	158,052,906	87,921,806
Cash provided by investing activities	22,862,341	16,344,803
FINANCING ACTIVITIES		
Leasehold inducements	3,368	2,884,123
Cash provided by financing activities	3,368	2,884,123
Net cash inflow (outflow)	(77,890)	472,324
Cash, beginning of year	1,145,372	673,048
Cash, end of year	1,067,482	1,145,372

Complete financial statements of the Canadian Institute for Health Information for the year ended March 31, 2007, are available upon request.

CANADIAN INSTITUTE FOR HEALTH INFORMATION

OFFICES ACROSS CANADA

OFFICES

CIHI OTTAWA
495 Richmond Road, Suite 600
Ottawa, Ontario K2A 4H6
Phone: 613-241-7860
Fax: 613-241-8120

CIHI TORONTO
90 Eglinton Avenue East, Suite 300
Toronto, Ontario M4P 2Y3
Phone: 416-481-2002
Fax: 416-481-2950

CIHI VICTORIA
880 Douglas Street, Suite 600
Victoria, British Columbia V8W 2B7
Phone: 250-220-4100
Fax: 250-220-7090

CIHI EDMONTON
10235 101 Street, Suite 1414
Edmonton, Alberta T5J 3G1
Phone: 780-409-5438
Fax: 780-421-4756

CIHI MONTRÉAL
1010 Sherbrooke Street West, Suite 440
Montréal, Quebec H3A 2R7
Phone: 514-842-2226
Fax: 514-842-3996

ATLANTIC CANADA
St. John's, Newfoundland
Phone: 709-368-9965

www.cihi.ca / www.icis.ca